Before the Federal Communications Commission Washington, DC 20554

In the Matter of)	
Use of Spectrum Bands Above 24 GHz for)	GN Docket No. 14-177
Mobile Radio Services)	GIV BOOKELIVO. IV IV
Amendment of Parts 1, 22, 24, 27, 74, 60, 90, 95,)	WT Docket No. 10-112
and 101 To Establish Uniform License Renewal,)	W 1 DOCKCI NO. 10-112
Discontinuance of Operation, and Geographic)	
Partitioning and Spectrum Disaggregation Rules)	
And Policies for Certain Wireless Radio Services)	

To: The Commission

COMMENTS OF THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION

The Wireless Internet Service Providers Association ("WISPA") submits these

Comments in response to the *Frontiers Third Further Notice of Proposed Rulemaking* ("*Third FNPRM*") in the above captioned proceeding.¹

WISPA applauds the Commission for dismissing the petitions for reconsideration and reaffirming that the 37-37.6 GHz band ("Lower 37 GHz band") will be available on a coordinated shared licensed basis.² Low-barrier shared spectrum is critical for small providers, new market entrants, and competitive fixed wireless providers alike to have access to the spectrum necessary to deploy broadband in areas that are underserved or lack competition. By adopting relatively straight-forward sharing and coordination rules within the already proposed framework, the Commission can allow for near-term use of the band to help facilitate the

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¹ Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, Amendment of Parts 1, 22, 24, 27, 74, 60, 90, 95, and 101 To Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules And Policies for Certain Wireless Radio Services, Third Further Notice of Proposed Rulemaking, WT Docket No. 10-112, FCC 18-73 (rel. June 8, 2018) ("Third FNPRM").

² See id. at \P 38.

deployment of high-capacity fixed wireless broadband. WISPA urges the Commission to adopt rules that create a simple coordination mechanism that will evolve over time as the industry and technology of the band develop, streamline Part 101 frequency coordination, and craft effective and predictable federal sharing rules based on the same coordination framework.

Background

WISPA represents the interests of wireless Internet service providers ("WISPs") that provide high-speed fixed wireless broadband services to consumers, businesses, and anchor institutions across the country. WISPA's members include more than 800 WISPs, equipment manufacturers, distributors, and other entities committed to providing affordable and competitive fixed broadband services. WISPA estimates that WISPs serve more than 4,000,000 people, many of whom reside in rural areas where wired technologies may not be available or are not cost-effective to deploy.

To meet subscribers' needs, WISPs rely on a combination of licensed, lightly licensed (shared access), and unlicensed bands. Increasingly, in large part as a result of lower-cost and better-performing equipment, WISPs are expanding their networks from rural communities into suburban and urban areas to compete with wired broadband technologies, even at higher speeds. To further enable competitive choice, WISPs will, over time, require more short-range, high-capacity spectrum, including the Lower 37 GHz band, which offers significant capacity advantages over lower spectrum bands.

Discussion

I. COORDINATED SHARED ACCESS CAN START SIMPLY AND EVOLVE OVER TIME

WISPA agrees with the Commission that the Lower 37 GHz band has the potential to be an "innovation band in the mmW spectrum." Given the nascent state of technology in the band, the Commission should adopt a simple coordination mechanism that is founded on existing coordination schemes and evolves over time as technology and the industry matures to meet market demand. Furthermore, without significant analysis and characterization of the different deployment models, it is difficult if not impossible to develop a coordination technique based upon robust actual or modeled interference analysis that would effectively protect first-in-time systems and networks as proposed.⁴

WISPA, as a founding member of the Broadband Access Coalition ("BAC"), has made a similar proposal that would use the Part 101 frequency coordination process to enable point-to-multipoint operations in the 3700-4200 MHz band, first using existing frequency coordination procedures followed by more automated processes evolving over time with stakeholder involvement.⁵ Because frequency coordination under Part 101 is a well-known process, it can serve as the foundation (with modifications) for the initial coordination process in the Lower 37 GHz band.

The Commission seeks comment on whether to permit an applicant for a base station license to self-select a point around which it would receive interference protection to a specified distance.⁶ WISPA supports the use of base station licenses and proposes the use of geographic protection zones ("GPZs") that would provide interference protection within a specified distance

 3 *Id.* at ¶ 63.

 $^{^{4}}$ *Id.* at ¶ 65.

⁵ See Broadband Access Coalition, Petition for Rulemaking (filed June 21, 2017), at 34-35. The Commission has invited comment on this proposal. See Expanding Flexible Use of the 3.7 to 4.2 GHz Band, Order and Notice of Proposed Rulemaking, GN Docket No. 18-122, FCC 18-91 (rel. July 13, 2018), at 41.

⁶ See Third FNPRM at $\P\P$ 69, 71.

that reflects the outer limit of a typical base station transmission.⁷ The use of GPZs will allow for effective and efficient geographic coordination without overly complex, costly, and lengthy propagation analysis.

In addition, through the use of GPZs, should the Commission feel it is necessary, it can also require further frequency coordination by permitting a coordinator to decrease the spectrum authorized for a licensee from a maximum of 600 megahertz to a lesser amount of authorized spectrum. This approach would allow greater access to areas of congested spectrum and thus facilitate more market participation and access for users.

Moreover, the Commission can set the expectation now that it will continue to iterate on the coordination mechanism by adding dynamic elements over times. As more information about deployments and technology evolves, a more robust propagation model could be used to incorporate a greater number of variables about existing and proposed sites to better determine the likelihood of interference to existing systems, thus allowing for greater use when spectrum is congested.

WISPA believes that by utilizing an iterative process and a simple geographic coordination (with the option for additional frequency coordination), the industry, the Commission, and Federal users can develop dynamic coordination over time without hindering access to the band in the near term.⁸

II. PART 101 COORDINATION SHOULD BE STREAMLINED

As the BAC suggested in its Petition, the Commission can take steps to streamline the Part 101 coordination process by reducing the amount of time for notified parties to respond to coordination notifications. The Commission's Part 101 rules currently require a notified party to

 $^{^{7}}$ For example, the Commission proposes that base stations would receive protection for a distance of up to one kilometer. *See id.* at ¶ 71.

⁸ See Starry Inc., Letter, WT Docket No. 14-177 (July 13, 2017).

respond within 30 days. 9 By reducing the amount of time a party has to respond to coordination notices, the Part 101 coordination process can be significantly streamlined, which in turn reduces the total licensing timeline. WISPA also suggests that the Commission require only electronic notification as a means of expediting the coordination process.

CO-PRIMARY FEDERAL SHARING SHOULD BE BASED ON III. PREDICTABLE COORDINATION

The Commission seeks comment on "how best to accommodate coordination zones for future Federal operations" within the 37 GHz band. WISPA believes that coordination should be predictable, and should use the commercial coordination process as a foundation. The Lower 37 GHz band is an opportunity to create a mutually-beneficial sharing and coordination mechanism within which both commercial and Federal co-primary rights can be exercised over time.

The Commission could also designate additional pre-protected areas for Federal users. These areas should be predictable and not added on an ad hoc basis. For instance, the Commission could expand the existing list of 14 protected military bases¹¹ to include other bases outside of population centers.

In addition, as the coordination mechanism evolves to include techniques such as dynamic spectrum management, the Commission should coordinate with NTIA and other agencies to incorporate their registrations into the dynamic database. With agencies including their registrations in the dynamic database, collectively with the registrations that will be added as the coordination mechanism evolves, the coordination mechanism can continue to add more

⁹ See 47 CFR § 101.103(iv). ¹⁰ Third FNPRM at ¶ 74.

¹¹ 47 C.F.R. § 30.205(b)

users and sites, and all parties will benefit from streamlined administration. With greater predictability comes greater certainty to encourage investment, deployment, and innovation.

Conclusion

WISPA commends the Commission for its efforts to advance the availability of the Lower 37 GHz band for coordinated licensed shared access, and looks forward to working with the Commission and other stakeholders to create an effective and productive licensing and coordination mechanism.

Respectfully submitted,

WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION

By: /s/ Claude Aiken

Claude Aiken, President/CEO

Stephen E. Coran
Lerman Senter PLLC
2001 L Street, NW, Suite 400
Washington, DC 20036
(202) 416-6744
Counsel to the Wireless Internet Service Providers Association

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